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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,031	07/25/2000	Ikuko Umezawa	2927-0114P	6752

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EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

10

DATE MAILED: 10/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-10

**Office Action Summary**

Application N .

09/625,031

Applicant(s)

UMEZAWA, IKUKO

Examiner

Marc A Patterson

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 112 second paragraph rejection of Claim 1, of record on page 2 of the previous Action, is withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The phrases 'heel portion' and 'forefoot portion' do not appear in the specification.

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka et al. (U.S. Patent No. 5,533,282) in view of Wideman et al. (U.S. Patent No. 5,922,792) and Norton (U.S. Patent No. 4,559,724).

With regard to Claims 1 and 4, Kataoka et al disclose shoes having an outsole (the portion which contacts a surface; column 2, lines 56 – 65) including a spike having a disc shaped portion and a plurality of pins and a projecting portion having a ground contact surface (column 1, lines 59 – 67 and column 2, lines 1 – 4; Figure 2); the spikes and the plate to which they are attached comprise synthetic resin (column 1, lines 12 – 22); the height difference between the spikes and the projecting portion is 4 mm (column 5, lines 17 – 20). Kataoka et al fail to disclose spikes in which the synthetic resin is a rubber – molded material whose JIS – C hardness ranges from 35 to 95, and whose elongation at break is 280% or more, and which contains 30 wt% or more of acrylonitrile – butadiene copolymer, and the difference in JIS – C hardness between the ground – contact portion of the spike and the projected portion is in the range from 5 – 80.

Wideman et al. teach the use of a rubber composition (column 1, lines 24 – 34) for the making of a shoe sole (column 12, lines 3 – 26) which comprises acrylonitrile – butadiene copolymer (100%; column 3, lines 42 – 53); and has an elongation at break of 672% (which is greater than 280%; column 10, lines 25 – 49) for the purpose of using a rubber having good antifatigue properties (column 1, lines 5 – 9).

Norton teaches that it is known in the art to make the spikes (cleats) of a shoe sole from a synthetic resin having a lower hardness than the remainder of the sole (for spike and the remainder of the sole are made from the same polymer, but having different hardness; column 4, lines 23 – 31) for the purpose of enhancing shock absorbancy (column 4, lines 23 – 31).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for acrylonitrile – butadiene copolymer (100%; column 3, lines 42 – 53); and has an elongation at break of 672% (which is greater than 280%; column 10, lines 25 – 49) in Kataoka et al in order to use a rubber having good antifatigue properties as taught by Wideman et al., and to have provided for spikes having a different sole than the projected portion of the shoe for the purpose of enhancing shock absorbancy as taught by Norton.

Wideman et al do not teach a hardness of from 35 – 95, as measured by JIS – C. However, Wideman et al. teach a hardness of 50.5, as measured by sclerometer (Shore hardness; column 10, lines 25 – 48). Therefore, the hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the hardness, since the hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Wideman et al. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Norton does not teach a hardness difference of from 5 – 80, as measured by JIS – C. However, Norton teaches a hardness difference of 10, as measured by sclerometer (Shore hardness; column 4, lines 23 – 31). Therefore, the hardness difference would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the hardness difference, since the hardness difference would be readily determined through

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routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Norton. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

With regard to Claim 2, the polybutadiene taught by Wideman et al. contains 100% cis – 1,4 linkage (therefore greater than 70%; column 3, lines 42 – 53).

With regard to Claims 3 and 5, the spike is removably mounted (detachably attached) on the outsole (column 1, lines 11 – 17).

#### ANSWERS TO APPLICANT'S ANSWERS

6. Applicant's arguments, and amended claims regarding the 35 U.S.C. 112 second paragraph rejection of Claim 1, of record on page 2 of the previous Action, have been considered and have been found to be persuasive. The rejection has therefore been withdrawn. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 1 – 5 as being unpatentable over Kataoka et al. (U.S. Patent No. 5,533,282) in view of Wideman et al. (U.S. Patent No. 5,922,792) and Norton (U.S. Patent No. 4,559,724) have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 6 of Paper No. 7, that amended Claims 1 – 5 overcome the prior art of record. However, the phrases 'heel portion' and 'forefoot portion' do not appear in the specification, and therefore constitute new matter. The new 35 U.S.C. 112 first paragraph rejection of Claims 1 – 5 above is directed to amended Claims 1 – 5.

Applicant also argues, on page 6, that the rejection is improper because column 1, lines 12 – 22 of Kataoka et al. is insufficient to indicate that the spike disclosed by Kataoka et al. is made of synthetic resin. Kataoka et al. disclose a spike – attaching portion which is made of

synthetic resin, Applicant argues, but does not disclose a spike which is made of synthetic resin. However, the spike – attaching portion clearly is a portion of the spike.

Applicant also argues, on page 7, that the combination of Kataoka et al with Wideman et al is improper because Kataoka et al disclose a shoe for use in track and field events; it is therefore likely, Applicant speculates, that a resin which is used in Kataoka et al would be a harder material than the rubber materials which are taught by Wideman et al. However, as stated on page 2 of the previous Action, Kataoka et al disclose the use of synthetic resin, which certainly does not exclude the use of any rubber. The term ‘hard plate’ is used in Kataoka to describe the body of insole, but this is a relative term which still does not exclude the use of the rubber compositions which Wideman et al. teach for the making of insoles.

Applicant also argues, on page 9, that the hardness which is taught by Wideman et al is outside of the claimed range. However, as stated on page 2 of the previous Action, Wideman et al. teach a hardness of 50.5, as measured by sclerometer (Shore hardness; column 10, lines 25 – 48). Therefore, the claimed range of hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the hardness, since the hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Wideman et al *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Applicant also argues, on page 9, that the rejection is improper because Norton does not teach that it is known for the spikes of a shoe sole to have a lower hardness than the remainder of the shoe sole. Although the cleats taught by Norton have a lower hardness than the remainder of

the shoe sole, Applicant argues, the cleats are not the same as spikes. However, Norton also teaches that spikes and cleats are equivalent as traction elements of a shoe sole (column 1, lines 31 – 55).

Applicant also argues, on page 10, that the previous Action provides no motivation for varying the hardness which is taught by Wideman et al. However, as stated above, Wideman et al. teach a hardness of 50.5, as measured by sclerometer (Shore hardness; column 10, lines 25 – 48). Therefore, the claimed range of hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the hardness, since the hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Wideman et al *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Applicant also argues, on page 11, that the rejection is improper because Norton does not teach a hardness difference of from 5 – 80, as measured by JIS – C. However, as stated on page 2 of the previous Action, Norton teaches a hardness difference of 10, as measured by sclerometer (Shore hardness; column 4, lines 23 – 31). Therefore, the hardness difference would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the hardness difference, since the hardness difference would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Norton. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).



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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*  
Art Unit 1772

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772* *9/30/02*